

# Day Surgery

## Routines, pain and recovery

Akademisk avhandling

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av

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Leg. läk

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Avhandlingen baseras på följande delarbeten:

- I. Segerdahl M, Warrén-Stomberg M, Rawal N, Brattwall M, Jakobsson J. Clinical practice and routines for day surgery in Sweden: results from a nation-wide survey. *Acta Anaesthesiol Scand.* 2008 Jan;52(1):117-24.
- II. Brattwall M, Warrén Stomberg M, Rawal N, Segerdahl M, Houltz E, Jakobsson J. Postoperative impact of regular tobacco use, smoking or snuffing, a prospective multi-center study. *Acta Anaesthesiol Scand.* 2010 Mar;54(3):321-7.
- III. Brattwall M, Warrén Stomberg M, Rawal N, Segerdahl M, Jakobsson J, Houltz E. Recovery after day surgery; a prospective questionnaire survey during the first 30 days. Accepted for publication. *Acta Anaesthesiol. Scand.* 2010.
- IV. Brattwall M, Stomberg MW, Rawal N, Segerdahl M, Houltz E, Jakobsson J. Patient assessed health profile: a six-month quality of life questionnaire survey after day surgery. *Scand J Public Health.* 2010 Aug;38(6):574-9.
- V. Brattwall M, Turan I, Jakobsson J. Pain management after elective hallux valgus surgery: a prospective randomized double-blind study comparing etoricoxib and tramadol. *Anesth Analg.* 2010 Aug;111(2):544-9.



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# **Day Surgery Routines, pain and recovery**

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## **ABSTRACT**

Day surgery in Sweden is increasing both in numbers and in types of procedures. Also older and sicker patients are often included in day case surgery programs, which puts an extra demand on good practice.

*Methods:* Study **I**: Questionnaires regarding routines used in 2005 were sent to all day surgery clinics in Sweden. Studies **II, III, IV**: These studies (in 355 patients) were designed as prospective, multi centre, self-assessed follow-up studies, where questionnaires were answered by the patients preoperatively and up to 6 months after surgery. Three typical day surgery procedures were chosen; inguinal hernia repair, arthroscopic procedures, cosmetic breast augmentation. A preoperative health profile was the starting point. An extended 8-item EQ-5d questionnaire was used. The questions focused on quality of life and on pain. Study **V**: This interventional pain study after hallux valgus surgery was designed as a prospective, randomized double blind study in 100 patients.

*Results:* In study **I** was shown that a high degree of standardization is present among Swedish day surgery units with pain being the most common postoperative problem. Study **II** showed that tobacco use by smoking or snuffing decreased postoperative nausea but had no effect on postoperative pain. In study **III**, unplanned hospital contacts were recorded for 70/355 patients while 3 patients were readmitted. Postoperative pain was reported in 40%, 28% and 20% of included patients after 1, 2 and 4 weeks respectively. Presence of pain preoperatively was identified as the main predictor for postoperative pain. In study **IV**, longitudinally changes in 8-item health profile was shown to be different between procedures during 6 months follow-up. In study **V** we showed that in treating postoperative pain, etoricoxib was more effective with less side effects than tramadol.

*Conclusions:* Day surgery as presently performed is safe and without major morbidity. The preoperative health profile is important for the recovery course. Pain is the main reported postoperative problem followed by mobility problems. Recovery is divergent for different surgery and calls for different follow-up times. In treatment of pain after foot surgery, the NSAID etoricoxib is shown to be more efficient than tramadol without deleterious effects on healing.

**Key words:** day surgery, postoperative pain, analgesics, tramadol, etoricoxib, postoperative nausea and vomiting (PONV), nicotine, snuff, recovery, EQ-5d, health profile, self-assessed questionnaire, follow-up.

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